/₹	Substitute (Modified)	Form PTO-1449
O`	-&E	, Information
NO	0 8 2004	윒

U.S. Department of Commerce Patent and Trademark Office Attorney's Docket No. 04037-011002

November 12, 2003

Application No. 10/706,687

mation Disclosure Statement by Applicant (Use several sheets if necessary) Applicant David E. Wolf

Filing Date

Group Art Unit 1714

(37 CFR §1:98(b

U.S. Patent Documents Examiner Patent Desig. Filing Date Initial Issue Date ID Number Patentee Class Subclass, If Appropriate AA 4,041,932 08/16/77 **Fostick** 01/31/78 AB 4,071,020 Pugliese AC 4,330,299 05/18/82 Сегаті AD 4,344,438 08/17/82 Schultz ΑE 4,352,883 10/05/82 Lim AF 4,353,888 10/12/82 Sefton 4,391,909 07/05/83 AG Lim AH 4,401,122 08/30/83 Clark, Jr. ΑI 4,409,331 10/11/83 Lim AJ. 4,532,123 07/30/85 Gardner ΑK 4,663,286 05/05/87 Tsang et al. ΑL 4,744,933 05/17/88 Rha et al. AM 4,806,355 02/21/89 Goosen et al. AN 4,868,103 09/19/89 Stavrianopoulos et al. 4,933,185 AO 06/12/90 Wheatley et al. ΑP 4,981,779 01/01/91 Wagner AQ 5,001,051 03/19/91 Miller et al. AR 5,028,787 07/02/91 Rosenthal et al. 01/28/92 AS 5,084,350 Chang et al. AT 5,101,814 04/07/92 Palti 5,143,066 ΑU 09/01/92 Komives et al. ΑV 05/18/93 5,211,945 Wallach et al. AW 5,227,298 07/13/93 Weber et al. ΑX 5,244,636 09/14/93 Walt et al. ΑY 06/14/94 5,320,814 Walt et al. ΑZ 5,324,518 06/28/94 Orth et al. AAA 5,326,531 07/05/94 Hahn et al.

Examiner Signature	/	yom	Date Considered 8-21 8
EXAMINER: Initials of next communication to	itation considere	d. Draw line through citation if no	t in conformance and not considered. Include copy of this form with

_	Substitute Form PTO-1449 (Modified)	U.S. Department of Commerce Patent and Trademark Office	Attorney's Docket No. 04037-011002	Application No. 10/706,687	
)		isclosure Statement Applicant	Applicant David E. Wolf		
	(Use severa	I sheets if necessary)	Filing Date	Group Art Unit	

CA TONN			U.S. Pate	ent Documents			
Examiner Initial	Desig. ID	Patent Number	Issue Date	Patentee	Class	Subclass	Filing Date If Appropriate
7	ABB	5,330,768	07/19/94	Park et al.		/	
	ACC	5,341,805	08/30/94	Stavridi et al.			
	ADD	5,342,789	08/30/94	Chick et al.			
	AEE	5,427,935	06/27/95	Wang et al.			
	AFF	5,459,054	10/17/95	Skjak-Braek et al.			
	AGG	5,460,971	10/24/95	Gottlieb			
	АНН	5,512,544	04/30/96	Wallach et al.		1.	
	AII	5,543,158	08/06/96	Gref et al.			
	AJJ	5,545,423	08/13/96	Soon-Shiong et al.			
	AKK	5,578,325	11/26/96	Domb et al.			
	ALL	5,626,862	05/06/97	Brem et al.			
	AMM	5,651,980	07/29/97	Lanza et al.			
	ANN	5,679,340	10/21/97	Chappel	1 1		
	AOO	5,869,077	02/09/99	Dionne et al.			
	APP	5,871,767	02/16/99	Dionne et al.	1/		
	AQQ	5,972,363	10/26/99	Clikeman et al.	1/		
	ARR	5,955,108	09/21/99	Sutton et al.	1/		· · · · · · · · · · · · · · · · · · ·
•	ASS	6,040,194	03/21/00	Chick et al.	1/		
n	ATT	6,126,936	10/03/00	Lanza et al.	\forall		-

	Foreig	n Patent Doc	uments or F	ublished Foreign	Patent A	Application	าร	
Examiner	Desig.	Document	Publication	Country or			Trans	lation
Initial	ID	Number	Date	Patent Office	Class	Subclass	Yes	No
17	UUA	0 127 713	11/02/89	EPO				
	AVV	0 127 989	12/12/84	EPO		/ .		
	AWW	0 180 309 B2	12/17/97	EPO-				
	AXX	0 188 309 B1	05/23/90	ЕРО				
3	AYY	0 301 777 A1	02/01/89	EPO	4			

Examiner Signature <i>UMU</i>	You	Date Considered 6-22 6
EXAMINER: Initials citation considered. Description of the communication to applicant.	oraw line through citation if no	ot in conformance and not considered. Include copy of this form with

Substitute Form PTO-1449 (Modified)	U.S. Department of Commerce Patent and Trademark Office	Attorney's Docket No. 04037-011002	Application No. 10/706,687
	closure Statement oplicant	Applicant David E. Wolf	
(Use several sheets if necessary) (37 CFR §1.98(b))		Filing Date November 12, 2003	Group Art Unit 1714

Foreign Patent Documents or Published Foreign Patent Applications								
Examiner	Desig.	Document	Publication	Country or				lation
Initial	ID ,	Number	Date	Patent Office	Class	Subclass	Yes	No
3	AZZ	0 433 900 B1	09/20/95	EPO		(
//	AAAA	0 512 528 B1	09/15/99	EPO				_
	ABBB	0 526 905 A2	02/10/93	EPO				
	ACCC	0 606 869 A1	07/20/94	EPO				-
	ADDD	1 236 885	06/23/71	GB				
	AEEE	1 257 178	12/15/71	GB		/		
	AFFF	2 119 734 A	11/23/83	GB				
	AGGG	WO 83/03061	09/15/83	PCT .	\top			
	АННН	WO 90/10861	09/20/90	PCT				
	AIII	WO 92/19195	11/12/92	PCT	17			
	AJJJ	WO 93/24112	12/09/93	PCT	17			-
	AKKK	WO 94/12161	06/09/94	PCT				
	ALLL	WO 94/15589	07/21/94	PCT	Π			-
	AMMM	WO 95/19743	07/27/95	PCT				
	ANNN	WO 95/31206	11/23/95	PCT		-		
	A000	WO 96/28029	09/19/96	PCT				
3	APPP	WO 99/29306	06/17/99	PCT				

	Other Documents (include Author, Title, Date, and Place of Publication)				
Examiner Desig.					
Initial	ID	Document			
3	AQQQ	Abbas et al., "Cytokines," Cell. Mol. Immunol., W.B. Saunders Co., 2 nd Edition, 1994, Chapter 12, pp. 240-260			
(/	ARRR	Bruce and Heinrich, "Production and Characterization of Biologically Active Recombinant Human Nerve Growth Factor," Neurobiology of Aging, 1989, 10:89-94			
	ASSS	Bruni et al., "Hepatocytes Immobilised by Microencapsulation in Artificial Cells: Effects on Hyperbilirubinemia in Gunn Rats," Biomat., Art. Cells, Art. Org., 1989, 17(4):403-411			
	ATTT	Cai et al., "Development and Evaluation of a System of Microencapsulation of Primary Rat Hepatocytes," Hepatology, 1989, 10(5):855-860			
	AUUU	Cardullo et al., "Detection of nucleic acid hybridization by nonradiative fluorescence resonance energy transfer," Proc. Natl. Acad. Sci. USA, 1988, 85(23):8790-8794			
3	AVVV	Cardullo et al., "Synthesis, Purification, and Characterization of 2,4,6-Trinitrophenyl-UDP-galactose: A Fluorescent Substrate for Galactosyltransferase," Anal. Biochem., 1990, 188:305-309			

Examiner Signature (all Yorn	Date Considered $6-22-66$
EXAMINER: Initials citation considered. Draw line through citation if no next communication to applicant	t in conformance and not considered. Include copy of this form with

Substitute Form PTO-1449 (Modified)	U.S. Department of Commerce Patent and Trademark Office	Attorney's Docket No. 04037-011002	Application No. 10/706,687	
by Ap	closure Statement oplicant	Applicant David E. Wolf		
(Use several sheets if necessary) (37 CFR §1.98(b))		Filing Date November 12, 2003	Group Art Unit 1714	

	Other Documents (include Author, Title, Date, and Place of Publication)				
Examiner Initial	Desig. ID	Document			
By	AWWW	Сетта, "Hypermetabolism, organ failure, and metabolic support," Surgery, 1987, 101(1):1-14			
1	AXXX	Chang et al., "Semipermeable Aqueous Microcapsules. I. Preparation and Properties," Can. J. Physiol. Pharmacol., 1966, 44:115-128			
	AYYY	Chang, "Artificial Cells: The Use of Hybrid Systems," Artificial Organs, 1980, 4(4):264-271			
	AZZZ	Chang, "Artificial Cells in Immobilization Biotechnology," <u>Biomat., Art. Cells & Immob. Biotech.</u> , 1992, 20(5):1121-1143			
	AAAA	Chang, "Blood Substitutes Based on Modified Hemoglobin Prepared by Encapsulation or Crosslinking: An Overview," Biomat., Art. Cells & Immob. Biotech., 1992, 20(2-4):159-179			
	ABBBB	Chang, "Living Cells and Microorganisms Immobilized by Microencapsulation inside Artificial Cells," Fundamentals of Animal Cell Encapsulation and Immobilization, 1993, Goosen (ed.), CRC Press, Chapter 8, pp. 183-196			
	ACCCC	Chang, "Bioencapsulation in Biotechnology," Biomat., Art. Cells & Immob. Biotech., 1993, 21(3):291-297			
	ADDDD	Chien et al., "The two-hybrid system: A method to identify and clone genes for proteins that interact with a protein of interest," Proc. Natl. Acad. Sci. USA, 1991, 88:9578-9582			
•	AEEEE	Dahinden et al., "Regulation of Cytokine Expression by Human Blood Basophils," <u>Int. Arch.</u> <u>Allergy Immunol.</u> , 1997, 113:134-137			
	AFFFF	de Oca et al., "21-Aminosteroid & 74389G (Lazaroid) Inhibits Bacterial Translocation After Small Bowel Transplantation in Rats," <u>Transplantation Proceedings</u> , 1997, 29(3):1803			
	AGGGG	Dupuy et al., "Microencapsulation of isolated pituitary cells by polyacrylamide microlatex coagulation on agarose beads," <u>Biomaterials</u> , 1991, 12(5):493-496			
	АННН	53(7):1055-1060			
	AllII	Fici et al., "Effects of Lazaroids and a Peroxynitrite Scavenger in a Cell Model of Peroxynitrite Toxicity," Free Radical Biology & Medicine, 1997, 22(1/2):223-228			
	AJJJJ	Förster, "Experimentelle und theoretische Untersuchung des zwischenmolekularen Übergangs von Elektronenanregungsenergie," Zeitschrift für Naturforschung, 1949, 4a:321-327			
	AKKKK	Förster, "Transfer Mechanisms of Electronic Excitation," <u>Discussions of the Faraday Society</u> , 1959, 27:7-17			
	ALLLL	Goodman et al., "Long Pentraxins: an Emerging Group of Proteins with Diverse Functions," Cytokine & Growth Factor Reviews, 1996, 7(2):191-202			
ć	AMMMM ·	Goosen et al., "Immobilization of Living Cells in Biocompatible Semipermeable Microcapsules: Biomedical and Potential Biochemical Engineering Applications," Polymers in Medicine II: Biomedical and Pharmaceutical Applications, 1985, Chiellini et al., (eds.), Plenum Press, pp. 235-246			
	ANNNN	Goosen, "Insulin Delivery Systems and the Encapsulation of Cells for Medical and Industrial Use," CRC Critical Reviews in Biocompatibility, 1987, 3(1):1-24			
	A0000	Grasbon-Frodl et al., "Mesencephalic neuron death induced by congeners of nitrogen monoxide is prevented by the lazaroid U-83836E," Exp. Brain Res., 1997, 113:138-143			
n	APPPP	Haugland, <u>Handbook of Fluorescent Probes and Research Chemicals</u> , 1989, Molecular Probes, Inc., Eugene, OR (TOC only)			

Examiner Signature TOW YOUN	Date Considered 6-22-06
EXAMINER: Initials citation considered. Draw line through citation if no next communication to applicant.	t in conformance and not considered. Include copy of this form with
mext communication to applicant.	

Substitute Form PTO-1449 (Modified)	U.S. Department of Commerce Patent and Trademark Office	Attorney's Docket No. 04037-011002	Application No. 10/706,687
Information Disclosure Statement by Applicant (Use several sheets if necessary) (37 CFR §1.98(b))		Applicant David E. Wolf	
		Filing Date November 12, 2003	Group Art Unit 1714

	Other Documents (include Author, Title, Date, and Place of Publication)		
Examiner Desig.			
		Document	
2	AQQQQ		Heller and Morrison, "Chemiluminescent and Fluorescent Probes for DNA Hybridization Systems,"
(-	Rapid Detection and Identification of Infectious Agents, 1985, Academic Press, pp. 245-256
ſ	1	ARRRR	Heller et al., "Fluorescent Energy Transfer Oligonucleotide Probes," <u>Federation Proceedings</u> , 1987, 46(6), Abstract No. 248
		ASSSS	Ishizaki et al., "Comparison of Various Lazaroid Compounds for Protection Against Ischemic Liver Injury," Transplantation Proceedings, 1997, 29(1/2):1333-1334
		ATTTT	Ito et al., "In vitro Study of Multicellular Hepatocyte Spheroids Formed in Microcapsules," Artif. Organs, 1992, 16(4):422-427
	A	AUUUU	Joyce et al., "Two inhibitors of pro-inflammatory cytokine release, interleukin-10 and interleukin-4,
	A	4VVVV	Kirk-Othmer, Encyclopedia of Chemical Technology, Fourth Edition, John Wiley & Sons, New York, Vol. 4, pp. 208-220
	A	www	Krysztopik et al., "Lazaroids Prevent Acute Cyclosporine-induced Renal Vasoconstriction," <u>Transplantation</u> , 1997, 63(9):1215-1220
	A	AXXXX	Kucharzik et al., "Synergistic Effect of Immunoregulatory Cytokines on Peripheral Blood Monocytes from Patients with Inflammatory Bowel Disease," <u>Digestive Diseases and Sciences</u> , 1997, 42(4):805-812
		Lakowicz, "Fluorescence Lifetime Sensing Generates Cellular Images," Laser Focus World, 1992,	
AZZZZ Lanza et al., "Xenotransplantation of canine, bovine, and porcine islets in diabetic rats without immunosuppression," Proc. Natl. Acad. Sci. USA, 1991, 88(24):11100-11104			
	A	AAAA	Lanza et al. (eds.), Immunomodulation of Pancreatic Islets, 1994, R.G. Landes, Texas, Chapter 7
	A	ввввв	Leung et al., "Microencapsulation of Crystalline Insulin or Islets of Langerhans: An Insulin Diffusion Study," Artificial Organs, 1983, 7(2):208-212
	A	rcccc	MacDonald, "Human Recombinant Histamine-Releasing Factor," Int. Arch. Allergy Immunol., 1997, 113:187-189
	A	DDDDI	McKinnon et al., "Cross-Linking a Maturation-Dependent Ram Sperm Plasma Membrane Antigen Induces the Acrosome Reaction," Molecular Reproduction and Development, 1991, 29:200-207
	A	AEEEEE	Meadows and Schultz, "Fiber-optic Biosensors Based on Fluorescence Energy Transfer," <u>Talanta</u> , 1988, 35(2):145-150
	A	GGGGC	Nguyen et al., "Interleukin (IL)-15 is a Novel Cytokine That Induces Lymphokine-activated Killer (LAK) Activity in Neonatal Cells," <u>J. Invest. Med.</u> , 1997, 45(3):241A
	A	нннн	Parker and Cox, "Glucose/oxygen sensor," SPIE, 1986, 713:113-120
		AIIIII	Patel and Gores, "Inhibition of Bile-Salt-Induced Hepatocyte Apoptosis by the Antioxidant Lazaroid U83836E," Toxicology and Applied Pharmacology, 1997, 142(1):116-122
2		AJJJJJ	Roberts et al., "Natural Killer (NK) Activity in Neonatal Cells: Role of Interleukin (IL)-12 and IL-15," J. Invest. Med., 1997, 45(3):235A

Examiner Signature	Date Considered /
(1)	
-1 $\Omega \Omega = 1.11$ $\Omega \Omega = 1.11$	6-22-00
	0 -
EXAMINER: Initials citation considered. Draw line through citation if n	ot in conformance and not considered. Include copy of this form with
next communication to annicant	

	Substitute Form PTO-1449 (Modified)	U.S. Department of Commerce Patent and Trademark Office	Attomey's Docket No. 04037-011002	Application No. 10/706,687
by Applicant (Use several sheets if necessary)		Applicant David E. Wolf		
		Filing Date November 12, 2003	Group Art Unit 1714	

Other Documents (include Author, Title, Date, and Place of Publication)		
Examiner Desig.		
Initial ID		Document
3	AKKKKK	Rosenberg et al., "Gene Transfer Into Humans – Immunotherapy of Patients with Advanced Melanoma, Using Tumor-Infiltrating Lymphocytes Modified by Retroviral Gene Transduction," New Eng. J. Med., 1990, 323(9):570-578
	ALLLLL	Schultz et al., "Affinity Sensor: A New Technique for Developing Implantable Sensors for Glucose and Other Metabolites," <u>Diabetes Care</u> , 1982, 5(3):245-253
	мммм	Segal et al., "Microbial Products Induce Autoimmune Disease by an IL-12-Dependent Pathway," <u>J. Immunol.</u> , 1997, 158:5087-5090
	ANNNN	Soon-Shiong et al., "An Immunologic Basis for the Fibrotic Reaction to Implanted Microcapsules," <u>Transplantation Proceedings</u> , 1991, 23(1):758-759
	A00000	Soon-Shiong et al., "Successful Reversal of Spontaneous Diabetes in Dogs by Intraperitoneal Microencapsulated Islets," <u>Transplantation</u> , 1992, 54(5):769-774
	APPPPP	Stryer and Haugland, "Energy Transfer: A Spectroscopic Ruler," Proc. Natl. Acad. Sci. USA, 1967, 58:719-726
	AQQQQ	Sun et al., "Microencapsulated Cells As Hormone Delivery Systems," <u>CRC Critical Reviews in</u> <u>Therapeutic Drug Carrier Systems</u> , 1987, 4(1):1-12
	ARRRR	Tanaka et al., "Lazaroid U-74500A For Warm Ischemia and Reperfusion Injury of the Canine Small Intestine," J. Am. Coll. Surg., 1997, 184(4):389-396
	ASSSSS	Torri et al., "Synaptosomal Iron-Dependent Lipid Peroxidation Inhibition After Subarachnoid Hemorrhage by Lazaroid In Vivo Treatment," Molecular and Chem. Neuropathol, 1997, 30(1/2):15-24
	ATTITI	Villa and Gorini, "Pharmacology of Lazaroids and Brain Energy Metabolism: A review," Pharmacological Reviews, 1997, 49(1):99-136
	AUUUUL	Warnock and Rajotte, "Critical Mass of Purified Islets That Induce Normoglycemia After Implantation Into Dogs," <u>Diabetes</u> , 1988, 37(4):467-470
	AVVVV	Welling et al., "Systemic Delivery of the Interleuekin-1 Receptor Antagonist Protein Using a New Strategy of Direct Adenoviral-Mediated Gene Transfer to Skeletal Muscle Capillary Endothelium in the Isolated Rat Hindlimb," Human Gene Therapy, 1996, 7(15):1795-1802
	wwww	Wesch et al., "Comparative analysis of αβ and γδ T cell activation by Mycobacterium tuberculosis and isopentenyl pyrophosphate," Eur. J. Immunol., 1997, 27(4):952-956
Widner et al., "Transplanted Allogeneic Fetal Dopamine Neurons S		Widner et al., "Transplanted Allogeneic Fetal Dopamine Neurons Survive and Improve Motor Function in Idiopathic Parkinson's Disease," <u>Transplantation Proceedings</u> , 1991, 23:793-795
Williams et al., "Continuous infusion of nerve growth factor prevented by the state of the state		Williams et al., "Continuous infusion of nerve growth factor prevents basal forebrain neuronal death after fimbria fornix transection," Proc. Natl. Acad. Sci. USA, 1986, 83(23):9231-9235
AZZZZZ Wilson, Biotechnology, 1983, 1:3-4		
Wong and Chang, "The Viability and Regeneration of Artificial Cell Microencapsulated Rat Hepatocyte Xenograft Transplants in Mice," Biomat., Art. Cells, Art. Org., 1988, 16(4):731-7		Hepatocyte Xenograft Transplants in Mice," Biomat., Art. Cells, Art. Org., 1988, 16(4):731-739
	ABBBBBI	Wong and Chang, "The Microencapsulation of Cells Within Alginate Poly-L-Lysine Microcapsules Prepared with the Standard Single Step Drop Technique: Histologically Identified Membrane Imperfections and the Associated Graft Rejection," <u>Biomat., Art. Cells & Immob. Biotech.</u> , 1991, 19(4):675-686
n	ACCCCC	Wong and Chang, "A Novel Two Step Procedure For Immobilizing Living Cells in Microcapsules for Improving Xenograft Survival," <u>Biomat., Art. Cells & Immob. Biotech.</u> , 1991, 19(4):687-697

Examiner Signature Coll Yom	Date Considered 6-22-00
EXAMINER: Initials citation considered. Draw line through citation if no	t in conformance and not considered. Include copy of this form with

Substitute Form PTO-1449 (Modified)	U.S. Department of Commerce Patent and Trademark Office	Attorney's Docket No. 04037-011002	Application No. 10/706,687
Information Disclosure Statement by Applicant (Use several sheets if necessary) (37 CFR §1.98(b))		Applicant David E. Wolf	
		Filing Date November 12, 2003	Group Art Unit 1714

Other Documents (include Author, Title, Date, and Place of Publication)			
Examiner	Desig.		
Initial	ID	Document	
3	ADDDDD	Young et al., "Inverted Microcarriers. Using Microencapsulation to Grow Anchorage-Dependent Cells in Suspension," BioPharm., 1989, 2:34-46	
4		Young, "Inverted Microcarriers: Using Microencapsulation to Grow Anchorage-Dependent Cells," <u>Fundamentals of Animal Cell Encapsulation and Immobilization</u> , CRC Press, 1993, Chapter 11, pp. 243-265	
1	AFFFFF	Zurawski and de Vries, "Interleukin 13, an interleukin 4-like cytokine that acts on monocytes and B cells, but not on T cells," Immunology Today, 1994, 15(1):19-26	